

REMARKS

Claims 1-4, 11-15, 17-23, 25-32, 38-43, 45-53, 55-65 and 67 are pending in this application, of which Claims 1, 11, 18, 26, 38, 46, 48, 56, 63-65 and 67 are in independent form. Claims 5, 16 and 44 have been canceled, without prejudice or disclaimer of subject matter. Claims 1, 11, 12, 14, 18, 26, 38, 46, 48, 56, 63-65 and 67 have been amended to define still more clearly what Applicants regards as their invention.

Claims 1-5, 11-23, 25-32, 38-53, 55-65 and 67 were rejected under 35 U.S.C. § 102(e) as being anticipated by U.S. Patent 6,097,854 (Szeliski et al.).

Independent Claim 1 is directed to an image processing apparatus for combining material images, which have been selected from a plurality of material images, to create an image patterned after an original image. The apparatus of Claim 1 comprises input means for inputting an original image, storage means for storing the plurality of material images, and image characteristic acquisition means for dividing the original image into a plurality of areas, subdividing each of these areas into a plurality of subareas and obtaining a first image characteristic of each subarea. Also provided in the apparatus of Claim 1 are designation means for designating an important area of each of the plurality of material images, means for obtaining a second image characteristic of each of the plurality of material images in dependence upon the important area designated by the designation means and distance calculation means for calculating a difference between the first image characteristic and the second image characteristic to calculate distances between each area of the original image and each of the material images. Selection means are also provided, for selecting a material image corresponding to each area in dependence upon the distances

calculated by the distance calculation means, and generating means are provided for generating the image patterned after the original image by pasting the material image selected by the selection means, to the corresponding area of the original image.

Szeliski relates to an apparatus that aligns a set plural overlapping images to produce a set of warped images. *Szeliski* uses the term "mosaic image" but what is represented by that term "mosaic image" in *Szeliski* is quite different from the term "mosaic image" as used in the present application.

In the apparatus according to Claim 1 (and in the aspects of the present invention respectively set forth in the other independent claims), an original image is divided into a plurality of areas, and each of the areas is pasted by a material image which is selected in dependence upon the distances between each area of the original image and each of the material images, such that an image patterned after the original image is generated.

In the apparatus of Claim 1, an important area of a material image is designated, and the distance between the first image characteristic of subarea in which each area is further divided and a second image characteristic of each material image in dependence upon the important area is calculated, and a material image is selected based on the distance.

On the contrary, according to *Szeliski*, the mosaic image (warped image) is formed by overlapping corresponding images, so it is important to establish point correspondences between overlapping images. Accordingly, *Szeliski* does not teach or suggest designating an important area of the material images which form the mosaic image,

and obtaining a second image characteristic of each of the plurality of material images in dependence upon the important area, and calculating a difference between a first image characteristic of each area and the second image characteristic to calculate distances between each area of the first image and each of the material images.

Similar to Claim 1 are Claims 11, 38 and 46, with the following additional points to be made as to the patentability of the latter claims.

In Claim 11, weighting information is inputted and the distance between the image characteristic of each area in which the original image is divided and image characteristic of each material image is calculated based on the weighting information.

In Claim 38, the distance between the image characteristic of each area in which the original image is divided and image characteristic of each material image is calculated.

Further, in Claim 46, the distance between the image characteristic of each area in which the original image is divided and image characteristic of each material image is calculated based on luminance or color difference of pixels in each area and each material image.

Accordingly, Claims 11, 38 and 46 are each also believed to be clearly allowable over *Szeliski* for the same reasons as is Claim 1, and in view of the further remarks just presented relating to each of these claims.

Independent Claim 18 is directed to an image processing apparatus for combining material images, which have been selected from a plurality of material images, to create an image patterned after an original image. The apparatus divides an original

image into a plurality of areas and determines whether each of the plurality of divided areas includes a partial area designated in the original image, and selects a material image that most closely resembles the area in which the partial area is included, from among a plurality of material images not yet selected, and generates the image patterned after the original image, by pasting the selected material image, to the area of the original image.

Claim 26 is directed to an image processing apparatus for combining material images, which have been selected from a plurality of material images, to create an image patterned after an original image. The apparatus divides an original image into a plurality of areas and calculates average luminance of each of the plurality of areas, and selects material images corresponding to respective ones of the plurality of areas based upon the calculated average luminance of each of the plurality of areas and the luminance of each material image, and generates the image patterned after the original image, by pasting the selected material images to respective ones of corresponding areas of the original image.

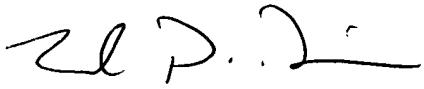
As described above, *Szeliski* discloses aligning a set plural overlapping images to produce a set of warped images, but does not disclose generating an image patterned after an original image by pasting the selected material image to each area in which the original image is divided. Further, *Szeliski* does not teach or suggest calculating average luminance of each of a plurality of areas in which an original image is divided, and selecting material images corresponding to respective ones of the plurality of areas based upon the calculated average luminance of each of the plurality of areas and the luminance of each material image.

Claims 48 and 56 are method claims corresponding to Claims 18 and 26, respectively, and are deemed allowable for the same reasons as are Claims 18 and 26.

In view of the foregoing amendments and remarks, and since the remaining claims are all allowable, Applicants respectfully request early passage to issuance of the present application.

Applicants' undersigned attorney may be reached in our New York office by telephone at (212) 218-2100. All correspondence should continue to be directed to our below listed address.

Respectfully submitted,



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